CLAIMS

What is claimed is:

1. A method of providing a biologically active moiety by administering cells that are naturally immune privileged and that have been isolated and genetically modified in a laboratory apparatus so as to express said biologically active moiety such that said cells express said biologically active moiety in pharmacologically effective amounts *in vivo*.

2. The method of claim 1 wherein said immune-privileged cells are derived from one of the tissues of the eye consisting of the iris, ciliary body, retina, and corneal endothelium.

3. The method of claim 1 where said immune privileged cells are Sertoli cells of the testes.

4. The method of claim 1 wherein said immune-privileged cells are from one of a group of cell types of the placenta consisting of trophoblasts, decidual cells, endometrial glandular epithelial cells, and endothelial cells.

5. The method of claim 1 where said immune-privileged cells are from one of a group of cells of the immune system consisting of T lymphocytes, B lymphocytes, natural killer cells, and macrophages.

6. The method of claim 1, where said immune-privileged cells are Paneth cells of gastrointestinal epithelium.

7. The method of claim 1, wherein said genetic modification is a nonviral physical method selected from the group including but not limited to microinjection, electroporation, lipofection, and

chemically-mediated transfection with calcium phosphate or liposomes.

8. The method of claim 1, wherein said genetic modification uses one or more viral vectors selected from the group including but not limited to retroviral vectors, adenoviral vectors, and, adeno-associated viral vectors.

9. The method of claim 1, wherein said administration is selected from the group of methods consisting of intravenous, intramuscular, intraperitoneal, and subcutaneous injection and infusions.

10. The method of claim 1, wherein said cells are administered by surgical implantation.

11. The method of claim 1, wherein said cells are administered to the central nervous system.

12. A composition comprising cells that are naturally immune privileged and that been isolated and genetically modified in a laboratory apparatus to express said biologically active moiety such that said cells express said biologically active moiety in pharmacologically effective amounts *in vivo*.

13. The composition of claim 12, wherein said biologically active moiety is not naturally expressed by said cells.

14. The composition of claim 12, wherein said biologically active moiety is naturally expressed by said cells in less than pharmacologically effective amounts.

15. The composition of claim 12, wherein said immune-privileged cells or tissues are non-human cells or tissues.

16. The composition of claim 12, wherein said immune-privileged cells or tissues are human cells or tissues.

17. The composition of claim 12, wherein said immune-privileged cells or tissues are primary cells.

18. The composition of claim 12, wherein said immune-privileged cells or tissues are immortalized cells.

19. The composition of claim 12, wherein said immune-privileged cells are progenitor stem cells.

20. The composition of claim 12, wherein said immune-privileged cells or tissues have been passaged one or more times.

21. The composition of claim 12, wherein said immune-privileged cells are obtained from a transgenic non-human animal or the descendent of the said transgenic non-human animal who has had DNA introduced at an embryonic state such that said immune-privileged cells express a biologically active moiety in pharmacologically effective amounts.

22. The method of claim 12, wherein said immune-privileged cells are adherent to a biologically inert material.

23. The composition of claim 12, wherein said biologically active moiety is selected from the group including but not limited to insulin, Clotting Factors II, VII, VIII, IX, X, vasopressin, adenosine deaminase, glucocerebrosidase, human growth hormone, erythropoietin, calcitonin, leptin, interferon alpha, interferon beta, granulocyte colony-stimulating factor, granulocyte-macrophage colony stimulating factor, gangliosides, interleukins, cytokines, and antibodies.

24. The composition of claim 12, wherein said biologically active moiety is selected from a group of molecules therapeutic for neurological diseases and conditions, including but not limited to neurotrophins, neurotrophic factors, proteins that stimulate axonal growth, and neurotransmitters.